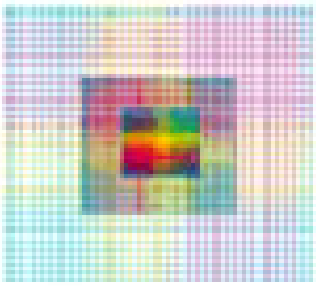


AUDIT II

Country Report
ITALY

Harris Andreosatos
Final Report December 2002

SUMMARY

In line with EU general objectives, the primary objective of Italy's energy policy concerns the implementation of numerous measures addressed to liberalize and increase the overall efficiency of the energy sector. Other relevant objectives relates to the diversification and security of energy supplies, the sustainable development and environmental safeguard, the economic growth, the technology innovation and the promotion of competitiveness of the production and service sectors. The Italian government in order to achieve the above mentioned policy objectives has adopted a strategy aiming at the diversification and penetration of new energy forms in power generation, the improvement of energy efficiency and conservation in end uses, and finally, a wider exploitation of renewable energy sources.

Energy Audit Programmes

None.

Other Programmes related to Energy Auditing

Utility Demand Side Management programmes
These programmes refer to the electricity and gas sectors in accordance with two legislative Decrees n.79/1999 and n.164/2000 that have been issued to comply with the European Directive 96/92/CE and 98/30/CE. The DSM measures include:

- Programmes aimed at reducing the energy consumed by specific end-use devices and systems while maintaining the quality of energy services provided. Savings will be achieved by replacing obsolete equipment with more advanced and efficient ones and by optimization of energy management techniques;
- Programmes referred to load management such as direct load control and interruptible load. Both programmes are aiming at peak savings, possibly by shifting peak usage to off-peak periods;
- Programmes aimed at increasing the use of efficient electric equipment (induction heating and melting, infrared drying) and at promoting the substitution of electricity for other form of energy where appropriate.

Decree n.337/200 - Green house gas emissions reduction programme
These energy efficiency programmes are based on Decree n.337/2000 aiming at reducing the energy consumption in the industrial, transport, and residential/ tertiary sectors and at promoting RES. The typologies of eligible measures include:

- Reduction of energy consumption in the industry, residential and tertiary sector, also through the implementation of energy-environmental audits (in industry;
- Demonstration projects in the field of cogeneration plants in the productive and civil sectors;
- Reduction of energy consumption in the transport sector by increase of utilization of innovative vehicles (i.e. electric, hybrid) and fuels (biofuels, natural gas) for urban collective transport fleets

- Co-financing up to 40 % of cost related with the construction of energy production plants utilising biomass and preferably integrated with district heating systems;

Law n^0.10/91 – Appointment of an Energy Manager

The Ministry of Production Activity (former Ministry of Industry) through the provisions of law n^0. 10/91 established, among others, the compulsory appointment of an energy manager by large consumers (that are industrial companies with a consumption higher than 10,000 TOE/year and organizations and companies operating in the residential/tertiary sector with more than 1,000 TOE/year). According to the above-mentioned law, the appointed energy managers are responsible for the conservation and rational use of energy within the companies and organizations they operate.

Implementing National Programme. - Technical Assistance and System Actions (PON ATAS)

The National Implementing Programme - Technical Assistance and System Actions (PON ATAS) constitutes a major part of the 3rd Community Support Framework (C.S.F) funded by the European Commission and Southern Italian Regions. This programme includes a project, which has as beneficiary the Ministry of Production Activity (the former Ministry of Industry). The main objective of this project is to implement technical assistance actions and provide concrete support to the organization and implementation of steering and co-ordination activities in the energy field. The work programme is articulated in three lines of action concerning: a) the development of a methodology for the preparation of regional energy balances, b) the energy-environmental characterization of industrial districts and finally c) the development of administrative procedures for implementing energy projects.

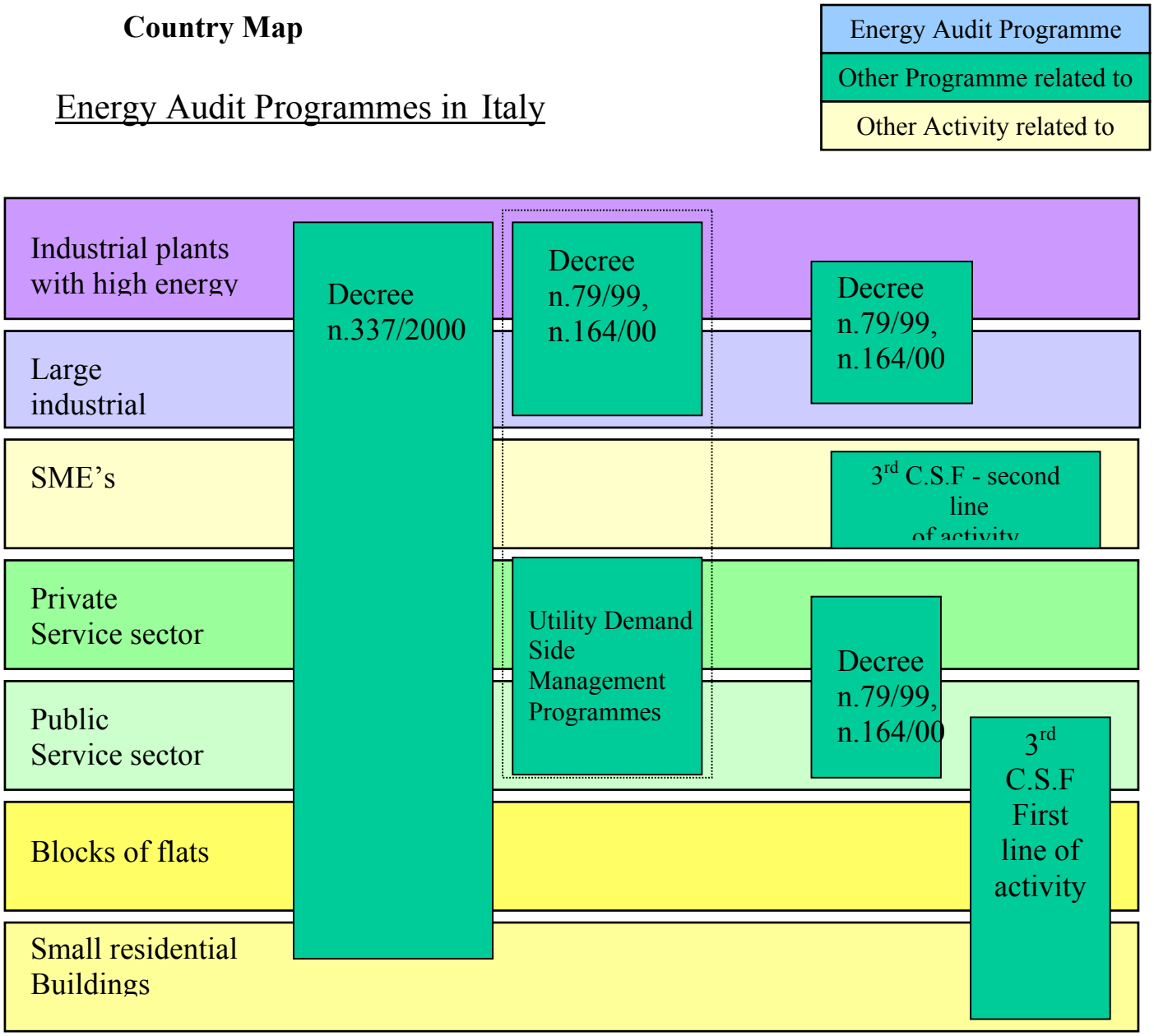
The final objective of the second line of activity is to evaluate the energy performance of the selected industrial district(s) and to provide companies with information about own use of energy and their energy efficiency performance compared to other companies within the same sector. The identification of suitable performance indicators (PIs) needed for making the comparison with other organizations is substantially based on the implementation of an energy diagnosis campaign within a sample of companies owning to the considered industrial district(s).

Other Activities including Energy Audits

None.

Country Map

Energy Audit Programmes in Italy



	Utility demand side management measures	Green house gas emissions reduction programme	National Implementing programme (PON ATAS)
Status	2002 – 2006		2002 – 2006
Administration	Regulatory Authority for Electricity and Gas – Ministry of Production Activities – Ministry of Environment	Ministry of Environment – ENEA	European Commission – Local Authorities
EA models	+	++	+
Auditors' tools	-	+	+
Training, authorisation	-	++	++
Quality control	-	-	-
Monitoring	+	+	-
Volumes, results	-	+	-
Evaluation	-	-	-

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Country Report

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Based on the information given by:	Walter Mario Cariani	**ENEA** - Italy

Disclaimer

The information contained in this report has been gathered from expert contacts. All efforts have been made to secure the veracity of the report, however the author cannot fully guarantee the content.

THE COUNTRY REPORT

COUNTRY REPORT ITALY

1. Background and Present National Policy

1.1 Previous activities

The priorities of national energy policy in Italy have been characterized by the National Energy Plan (Piano Energetico Nazionale – PEN) put in force through the laws 9 and 10 of 1991. The National Energy Plan aimed at increasing the energy efficiency in all sectors, the protection of the environment and human health, the development of renewable energy sources, the competitiveness of the production system and finally, the diversification of energy supply.

Numerous programmes have been introduced and implemented related to energy auditing activities. In the industrial sector, during the period 1986 – 1995, energy audits have been implemented in two phases. During the first phase, energy audits were planned and financed by ENEA covered the whole country. During the second phase, energy audits were co-financed by the European Commission and ENEA within the VALOREN programme covered the southern part of the country. About 1000 audits have been performed in Italian SMEs by ENEA experts both directly and in collaboration with consulting companies. In the building sector, PENSIAMO CINSIEME Initiative, under the responsibility of ENEA, involved energy audits in six medium size cities (50000 – 100000 inhabitants) aiming at reducing the energy consumption in the buildings of these cities as well as the environmental protection. Auditing activities have also been introduced concerning the tertiary sector financed by the Ministry of Industry. These auditing activities involved 70 energy diagnoses – audits in three pilot regions (Piemonte, Molise and Campania). In addition, pilot projects such as energy audit campaigns in schools and hotels were funded by EC VALOREN programme involving audits in over 500 buildings in several regions of southern Italy. In the industrial sector, energy-auditing activities have been implemented in three phases, all in the framework of the Industrial District Project.

1.2 Present national policy

Energy policy in Italy is actively engaged in an attempt to reduce the shortcomings within the country's energy system and to improve the development of its endogenous resources. The primary objectives of Italy's energy policy include the diversification and security of energy supplies, sustainable development and environmental safeguard, economic growth, employment development and finally, technology innovation and competitiveness of the production and service sectors. The Italian government in order to achieve the above-mentioned policy objectives adopted a strategy aiming at the diversification and penetration of new energy forms in power generation, improvement of energy efficiency and conservation and finally, the wider exploitation of renewable energy sources.

Two Legislative Decrees (n.79/1999 and n.164/2000) have been issued to comply with European Directives (96/92/CE and 98/30/CE) concerning the opening of the electricity and gas market. These Legislative Decrees among others include, the obligation to implement measures and interventions aimed at improving the energy

efficiency in end-users according to quantitative targets. These targets are progressive; for the first running period 2002-2006 the energy savings to be achieved are, in terms of primary energy, from 0,50 Mtoe (0,3 Mtoe for the electric sector and 0,2 Mtoe for the gas sector) in the first year (2002), up to 2,9 Mtoe (1,60 Mtoe for the electric sector and 1,30 Mtoe for the gas sector) in 2006.

In addition, the Ministry of the Environment introduced a Legislative Decree n.337/2000 dealing with criteria and modalities for utilising the 1999 revenues from the carbon tax. The total amount addressed to supportive actions and programmes for GHG emissions reduction is worth 145 MEURO of which 68 MEURO for national programmes and 77 MEURO for regional and local programmes. The above-mentioned programmes and projects concern cogeneration plants in the productive and civil sectors, improvement of energy efficiency in industrial/residential/tertiary and transport sectors as well as the development of engines at low or zero emission.

Finally, the earlier Law 10/91, which is still in force, establishes the compulsory appointment of an energy manager for every major energy user (industrial companies, tertiary organisations, civil and transport sectors) and lay down the coordination aspects of regional energy plans. Moreover, it sets out rules and guidelines for conducting energy auditing activities.

2. Energy Audit Programmes

There are no specific energy audit programmes.

3. Other Programmes including Energy Audits

3.1 Green house gas emissions reduction programmes

3.1.1 Short description - Goals

The criteria and modalities for utilizing the 1999 revenues from carbon tax, in terms of supportive actions and programmes, are described in a Legislative Decree n.337 issued in November 2000 by the Ministry of Environment. The total amount addressed to supportive actions and programmes for GHG emissions reduction is worth 145 MEURO of which 68 MEURO are related to national programmes and 77 MEURO are related to regional and local programmes. Additionally, in June 2001, the Ministry of Environment, according to article 3 of the Legislative Decree n.337/2000 enacted a Ministerial Decision providing the list of selected programmes and related funding. The total amount addressed to supportive actions and programmes for GHG emissions reduction is worth 25 MEURO for national programmes and 17.5 MEURO for international co-operation programmes regarding Kyoto mechanisms. For the former, selected programmes are related to demonstration projects in the field of:

- Demonstration projects in the field of cogeneration plants in the productive and civil sectors;
- Improvement of energy efficiency in industry, residential, tertiary and transport sectors;
- Development of engines at low and zero emission.

For the latter, bilateral projects for emissions reduction are to be implemented by Italian (public and private) organisations and partners from China, Bulgaria, Romania, Argentina, Cuba, Egypt and Brazil.

3.1.2 Target sectors

The supportive actions, programmes and financial measures for GHG emissions reduction are related to transport, industrial, building, renewable sources, residential and tertiary sectors.

3.1.3 Administration

The Ministry of Environment is the administrator of the management, supportive actions and financial measures. ENEA also supports industry to meet the targets regarding the reduction in energy consumption. As far as the programmes regarding the Kyoto mechanisms are concerned, Italian (public and private) organizations and partners from OCSE or developing countries are the main administrators.

3.1.4 Implementing Instruments

In order to promote actions related to the reduction of the energy consumption in the transport, industrial and residential/tertiary sectors, the Italian government will introduce co-financing measures. The implementing instruments for the co-operation programmes regarding the Kyoto mechanisms will include financial supportive measures up to 50% for the detailed design of the Joint Implementation (JI) and Clean

Development Mechanisms (CDM) programmes and for the promotion of projects implemented in Third Countries.
The interventions eligible for co-financing for the transport, industrial, residential and tertiary sectors are:

a. Reduction of energy consumption in the transport sector
   - Formulation and up-dating of traffic urban plans;
   - Uptake of intelligent technologies for transport systems (ITS);
   - Increase of utilization of innovative vehicles (i.e. electric, hybrid) and fuels (bio-fuels, natural gas) for urban collective transport fleets.

b. Reduction of energy consumption in industrial, residential and tertiary sector
   - Implementation of energy environmental audits (industrial sector)
   - Promotion and dissemination of high efficiency heating and air-conditioning systems (building sector)
   - Uptake of high efficiency electric components (motors and drives) and appliances;
   - Wider utilization of low-impact innovative fuels in industrial sector.

For the renewable energy sources programs, the co-financing will be:
- Up to 40% of cost related to the construction of energy production plants utilizing biomass and preferably integrated with district heating systems;
- Up to 30% of cost related to the construction of solar thermal plants;
- Up to 75% of cost related to the construction of PV energy production plants;
- Up to 40% of cost related to the construction, in small islands, of energy production plants utilizing wind energy, RDF and biogas.

3.1.5 Energy Audit Models

Preliminary studies carried out by FIRE (Italian Federation for Rational Use of Energy) showed that the energy auditing activities/programmes targeting at the green house gas emission reduction should be based on:
- Drawings of buildings and plants
- Maintenance standards and specifications
- Examination of energy characteristics of machines, plant and buildings prior to ordering or contracting, to give an opinion on energy efficiency and associated operating cost
- Identification of possible corrective actions emerging from the examination of the utility bills
- Analysis of consumption patterns with identification of possible operating problems causing variation of specific energy consumption

3.1.6 Auditors' tools in industry/public sector

In 1990s, ENEA has developed software packages such as ERS (Energy ReStyling) and ECU (Energy Check-Up) specifically designed to support the implementation of energy audits for the building envelope and technological plants. These software tools, which require input data (such as outside temperature, wall thickness) give suggestions about the possible technology interventions that might be adopted in order to improve the overall energy efficiency.

3.1.7 Training, authorization and quality control

The training procedure involves three lines of activities. In the first line, ENEA has developed and executed a large number (4 courses per year) of training courses addressed to energy managers, which include the implementation procedure of energy audits for specific sectors, such as industrial and tertiary sectors. The second line of activity is based on the Legislative Decree 412 of 1993. This L.D requires the compulsory inspection and maintenance service of heating plants located in the residential and tertiary buildings by qualified technicians. The technicians must fill out a logbook with all the recorded data setting down during the maintenance procedure. In parallel to that, the municipal authorities can send energy inspectors to verify that the data recorded in the logbook comply with the requirements of the L.D 412 of 1993. Based on the above requirements, ENEA has also developed and performed training courses specifically addressed to maintenance operators and energy inspectors from local authorities. After the completion of these training courses, the technicians and energy inspectors can get an energy certification, issued by ENEA, for attending the training courses. The third line of activity involves e-learning courses addressed to different topics.

3.1.8 Monitoring

The monitoring for the implementation of the Legislative Decree 412/93, concerning the compulsory inspection of heating plant in the residential/tertiary sector, has been carried out for a number of municipalities that are mainly located in the northern regions of Italy. The results achieved have been quite interesting as indicated in the following section.

3.1.9 Results

From the monitoring activities in the residential/tertiary sector, it has been found that energy savings of 5-10% can be achieved.

3.2 Utility Demand Side Management measures

3.2.1 Short description - Goals

In line with EU general objectives, the Italian government is implementing numerous measures in order to liberalise and increase the energy efficiency in end-uses of the energy sector. The role of the market in the energy sector was strongly emphasised by the National Conference on Energy and Environment, held in November 1998. Two Legislative Decrees have been recently issued in order to comply with the European Directives 96/92/CE and 98/30/CE:

1) The Legislative Decree n.79/1999
2) The Legislative Decree n.164/2000

The above-mentioned Legislative Decrees enacted in order to comply with the European Directives concerning the opening of the electricity and gas markets stating that the government’s concession to companies for undertaking the distribution of electricity and gas shall include the obligation to implement measures and interventions aimed at improving the energy efficiency in end-uses according to quantitative targets.

The quantitative targets, the modalities for designing and implementing the energy saving programmes along with the procedures to be adopted for the monitoring and evaluation of the programmes were defined by two Decrees issued on April 24th 2001 by the Ministry of Production Activities in collaboration with the Ministry of Environment. These targets are progressive for the first running period 2002-2006 and specify energy savings, in terms of primary energy, from 0,50 Mtoe (0,3 Mtoe for the electric sector and 0,2 Mtoe for the gas sector) in the first year (2002), up to 2,9 Mtoe (1,60 Mtoe for the electric sector and 1,30 Mtoe for the gas sector) in 2006. The obligations are in force for those distributors providing electricity or gas to more than 100000 end-users by December 31st 2001. The quota of energy saving to be achieved by the single distributor is proportional to the ratio between the electricity (or gas) distributed at a local level and the total electricity (or gas) distributed at a national level. The projects designed to comply with the requirements of the above-mentioned Decrees, may be implemented in three different ways:

a. Actions carried out directly by distributors;
b. Through companies owned/controlled by the distribution companies themselves;
c. Through ESCOs.

The costs to be incurred in by the distributors for the implementation of the projects can be covered, partly by the annual proceeds coming from the carbon-tax and partly by the tariffs paid by all end-users (either captive and eligible customers). The implementation of the energy efficiency programmes in line with the above-mentioned Decrees will allow Italy achieving, by 2006, a GHG emissions reduction of 7.3 Mtoe, that is about 15% of the Italian commitment under the Kyoto protocol. For the electricity and the gas sector, no less than 50% of the above-mentioned quantitative objectives must be achieved through measures and interventions.

3.2.2 Target sectors

The energy sector and more specifically the energy utilities (electricity and gas distributors) are the key target sectors.

3.2.3 Administration

The Regulatory Authority for Electricity and Gas (established by the law 481/95) along with the Ministry of Production Activities and Ministry of Environment are the administrators of the measures. ENEA also supports the Regulatory Authority for Electricity and Gas in order to develop the necessary guidelines for the preparation of sheets for standards calculations and for other interventions.

3.2.4 Implementing instruments

The Legislative Decree n.79/1999 introduces regulations governing, inter-alia, and the activities of production, despatching and distribution of electric energy. Most of the regulations needed for the implementation of this Decree are currently being defined.
The concession by the government to companies for undertaking the distribution activity shall include the implementation of programmes (measures) allowing the

achievement of improving the energy efficiency in end-uses according to quantitative targets (article 9, comma 1). Distribution companies will likely consider three programme categories for the implementation:

- Programmes aimed at reducing the energy consumed by specific end-use devices and systems while maintaining the quality of energy services provided. These programmes reduce overall electricity consumption but obviously their cost-effectiveness is increased when the usage coincides with peak demand periods. Savings will be achieved by replacing obsolete equipment with more advanced ones and by optimizing energy management techniques;
- Programmes referred to load management such as direct load control and interruptible load. Both programmes aim at peak savings, possibly by shifting peak usage to off-peak periods. The former allows the power supply to individual appliances or equipment to be interrupted during periods of peak demand by the utility system operator. The latter concerns the possibility for the consumer load to be interrupted either by direct control of the utility system operator or by action of the consumer, at the direct request of the system operator;
- Programmes aimed at increasing the use of efficient electric equipment (induction heating and melting, infrared drying) and at promoting the substitution of electricity for other form of energy (renewables for pre-heating of hot water preparation).

A particular attention is being paid for assigning costs appropriately, thus avoiding cross-subsidies that are inconsistent with liberalised markets.

A new support mechanism for renewable sources based on a minimum quota obligation was also introduced. It requires starting from 2002, energy producers and importers (i.e. those producing or importing electricity from non renewable sources exceeding 100 GWh, excluding combined heat and power generation, export and plant consumption) to ensure that a quota of all energy supplied to the market comes from plants fed by renewables, going into operation after April 1st 1999. The quota is fixed at 2%, but the Legislative Decree foresees that it will be increased in the forthcoming years. The minimum quota obligation and an associated tradable green certificate mechanism constitute a fundamental change in the policy and measures to support renewable energy sources (article 11, comma 5). A last remark can be made with reference to “tradable emission permits”, which make a command and control approach compatible with market for generation. This approach concerns meeting environmental objectives.

3.2.5 Energy Audit Models

ENEA supports the Regulatory Authority for Electricity and Gas in order to develop the necessary guidelines for the preparation of sheets for standards calculations and for other interventions.

3.2.6 Training, authorisation and quality control

There is no training and quality control mentioned for the utility demand side management measures.

3.2.7 Monitoring

Regulatory Authority for Electricity and Gas should check quantitative objectives and make an agreement with ENEA to support them.

3.3 Law n^0.10/91 – Appointment of an Energy Manager

3.3.1 Short description - Goals

Law n^0. 10/91 has supported the realization of energy investments in all sectors and energy audits in SMEs. More specifically, article 19 of law n^0. 10/91 extended the requirement to nominate energy manager to large consumers in the civil and transport sectors in order to promote the rational use of energy, energy savings and development of renewable energy sources.

3.3.2 Target sectors

Law n^0. 10/91 initially imposed the compulsory appointment of an energy manager for energy users such as industrial companies with more than 10,000 TOE/year, tertiary organizations and companies with more than 1,000 TOE/year. Article 19 of the above-mentioned law, extended the appointment of energy manager requirement to large consumers in the civil and transport sectors.

3.3.3 Administration

The Ministry of Industry is the main administrator of the law n^0. 10/91. The list of the energy managers nominated under the provisions of the above-mentioned law has complied and published by FIRE on behalf of the Ministry of Industry. Local energy authorities in conjunction with ENEA are also responsible for the co-ordination of the energy plans at a local level.

3.3.4 Implementing instruments

The necessary functions, guidelines and rules that describe the role and operation of an energy manager, are defined in article 9 of the law n^0.10/91 (more specifically in paragraphs 14,15,17) and the Official Gazette No.57 of 9.3.92 Circular 219F of March 2nd 1992 under point 13 of the annex with title “Functions and qualifications of the manager responsible for the conservation and rational use of energy”.

3.3.5 Energy Audit Models

Article 19 of law n^0.10/91 sets out the specifications and guidelines for conducting energy auditing activities. The main steps that an energy manager must follow in carrying out an energy audit are the following:

- Identify actions, measures and procedures in order to promote rational use of energy;
- Prepare energy balance sheets taking into account economic factors and energy uses.

3.3.6 Auditors' Tools

ENEA has developed a software tool specifically designed to assist energy audits in industrial and residential/tertiary sectors. This software tool requires some input data (e.g. outside temperature, wall thickness) and as a result it gives suggestions about the possible technology interventions that might be adopted.

3.3.7 Training, authorization and quality control

In order to keep energy managers qualifications to a maximum level, according to the paragraph 17 of the law n^0. 10/91, energy managers must be provided with adequate training and quality control courses. These training and quality control courses should include:

- Periodically updating seminars in the field of energy conservation;
- Updating courses on energy recovery;
- Preparation and distribution of specific technical documentation;
- Publicity of various energy management actions already performed;
- Questionnaires pointing out areas of interest (e.g., energy consumption in buildings).

A large number of training courses held at various cities across Italy have been initiated and implemented by ENEA. These training courses lasted an average of four days.

3.4 National Implementing Programme. - Technical Assistance and System Actions (PON ATAS)

3.4.1 Short description - Goals

The Southern Italian Region along with the European Commission introduced a major project, which consists of three lines of activities and aiming at the energy inputs/outputs consumption of used fossil fuels, the energy characterization of industrial districts and finally the development of administrative procedures for implementing energy projects.

More specifically, the first line of activity involves an energy regional balance across industrial, transport, and residential/tertiary sectors. This energy balance will record the energy input/output consumption of all fossil fuel used across the above-mentioned energy sectors. The second line of activity involves the creation of an energy information system concerning industrial districts, i.e. several SMEs producing the same products (e.g. shoes, ties, glass, etc). The aim of this activity is

the energy characterization of industrial districts based on the value of the energy performance for the production of specific good (e.g. a pair of shoes). This value is then compared to other European industrial districts for locating the most efficient one. A compulsory step of this activity is the conduction of energy audits to a selected sample of SMEs. This involves the completion of specific questionnaire that is prepared by the Energy Manager aimed at evaluating the various industrial processes that are adopted by the SMEs. After the completion of the energy audit and depending on the results (based on the energy performance), the local authorities will then decide upon the measures (RES or RUE technologies) that the SMEs will use for improving their energy performance. The money for the implementation of these measures will come from the European Commission in collaboration with the local authorities. The implementation of the two above-mentioned lines of activities will start this year (2002) although the 3rd C.S.F officially started in 2000 and will be finished in 2006. The third line of activity involves the development of administrative procedures for the implementation of energy projects. This is due to the fact that the regional authorities need to have energy experts for utilizing energy efficiency projects.

3.4.2 Target sectors

The above-mentioned lines of activities regarding the 3rdC.S.F in Southern Italy target mainly the SMEs (second line of activity) and industrial, transport and residential/tertiary sectors (first line of activity).

3.4.3 Administration

The European Commission along with the local authorities is the administrator of the 3rd C.S.F. ENEA experts carry out the conduction of the energy audits.

3.4.4 Implementing instruments

The necessary functions, guidelines and rules that describe the role and operation of an energy manager, are defined in article 9 of the law n0.10/91 (more specifically in paragraphs 14,15,17) and the Official Gazette No.57 of 9.3.92 Circular 219F of March 2nd 1992 under point 13 of the annex with title “Functions and qualifications of the manager responsible for the conservation and rational use of energy”.

3.4.5 Energy Audit Models

Article 19 of law n0.10/91 sets out the specifications and guidelines for conducting energy auditing activities. The main steps that an energy manager must follow in carrying out an energy audit are the following:

- Identify actions, measures and procedures in order to promote rational use of energy;
- Prepare energy balance sheets taking into account economic factors and energy uses.

3.4.6 Auditors' Tools

In 1990s, ENEA has developed a software tool specifically designed to assist energy audits in industrial and residential/tertiary sectors (see line of activity one and two). This software tool requires some input data (e.g. outside temperature, wall thickness) and as a result it gives suggestions about the possible technology interventions that might be adopted.

3.4.7 Training, authorization and quality control

The training procedure involves three lines of activities. In the first line, ENEA has developed and executed a large number (4 courses per year) of training courses to energy auditors concerning the implementation procedure of energy audits and targeting specific sectors, such as industrial and tertiary sectors. The second line of activity is based on the Legislative Decree 412 of 1993. This L.D states the compulsory inspection and maintenance service of the boiler-burner-chimney system by authorised technicians. The technicians must fill out a logbook with all the recorded data from the maintenance service. In parallel to that, the municipal authorities might send energy inspectors to see if the data in the logbook comply with the requirements of the L.D 412 of 1993. Based on the above requirements, ENEA has also developed and performed training courses regarding the maintenance procedure of the boiler-burner-chimney system of residential buildings for both, technicians and energy inspectors from the local authorities. After the completion of these training courses, the technicians and energy inspectors can get an energy certification by ENEA for attending the training courses. The third line of activity involves learning courses addressed to different topics for both energy managers and professionals.